

What is claimed is:

1. A method of performing preliminary flashing for a camera, the method comprising:

generating a first readout signal pulse;

performing preliminary flashing at a time t_1 after the rising edge of the first readout signal;

generating the rising edge of a second readout signal pulse at a time t_2 that is after time t_1 ;

measuring a first average brightness at time t_2 ;

ending preliminary flashing at a time t_3 after time t_2 ;

generating the rising edge of a third readout signal pulse at a time t_4 ; and

measuring a second average brightness at time t_4 .

2. The method of claim 1, wherein the rising edge of the readout signal pulses are generated after the falling edge of vertical sync signals.

3. The method of claim 1, wherein the first average brightness is measured exactly at time t_2 .

4. The method of claim 1, wherein the second average brightness is measured exactly at time t_4 .

5. The method of claim 1, further comprising:
if the first average brightness is greater than an upper limit and the second average brightness is less than a lower limit, then redoing the process, beginning with the first step.

6. The method of claim 1, further comprising:
if the first average brightness is greater than an upper limit and the second average brightness is greater than a lower limit, then setting main flashing time in accordance with the second average brightness.

7. The method of claim 1, further comprising:
if the first average brightness is less than an upper limit and the second average brightness is greater than a lower limit, then setting main flashing time in

accordance with the average of the first average brightness and the second average brightness.

5 8. The method of claim 7, wherein the main flashing time is inversely proportional to the average of the first average brightness and the second average brightness.

 9. The method of claim 1, further comprising:
 if the first average brightness is less than an upper limit and the second
10 average brightness is less than a lower limit, then setting main flashing time in accordance with the first average brightness.

 10. The method of claim 1, further comprising:
 performing main flashing.

15 11. The method of claim 10, wherein the main flashing is performed a set time after t3.

 12. The method of claim 11, wherein the set time is 760 ms.

20 13. The method of claim 1, wherein the camera is a digital camera.

 14. A method of performing preliminary flashing for a camera, the method comprising:

25 generating a first readout signal pulse;
 performing preliminary flashing at a time t1 after the rising edge of the first readout signal;
 generating the falling edge of a second readout signal pulse at a time t2 that is after time t1;
30 measuring a first average brightness at time t2;
 ending preliminary flashing at a time t3 after time t2;
 generating the falling edge of a third readout signal pulse at a time t4; and
 measuring a second average brightness at time t4.

35 15. The method of claim 14, wherein the time t1 is after the falling edge of the first readout signal.

 16. The method of claim 14, further comprising:

if the first average brightness is greater than an upper limit and the second average brightness is less than a lower limit, then redoing the process, beginning with the first step.

5 17. The method of claim 14, further comprising:
if the first average brightness is greater than an upper limit and the second average brightness is greater than a lower limit, then setting main flashing time in accordance with the second average brightness.

10 18. The method of claim 14, further comprising:
if the first average brightness is less than an upper limit and the second average brightness is less than a lower limit, then setting main flashing time in accordance with the first average brightness.

15 19. The method of claim 14, further comprising:
if the first average brightness is less than an upper limit and the second average brightness is greater than a lower limit, then setting main flashing time in accordance with the average of the first average brightness and the second average brightness;

20 20. The method of claim 19, wherein the main flashing time is inversely proportional to the average of the first average brightness and the second average brightness.

25 21. The method of claim 14, further comprising:
performing main flashing.

 22. The method of claim 21, wherein the main flashing is performed a set time after t3.

30 23. A method of performing preliminary flashing for a camera, the method comprising:

 generating a first readout signal pulse;
 performing preliminary flashing at a time t1 after the rising edge of the first
35 readout signal;
 generating the rising edge of a second readout signal pulse at a time t2 that is after time t1;
 measuring a first average brightness at time t2;

ending preliminary flashing at a time t3 after time t2;
generating the falling edge of a third readout signal pulse at a time t4; and
measuring a second average brightness at time t4.

5 24. A method of performing preliminary flashing for a camera, the method comprising:

generating a first readout signal pulse;
performing preliminary flashing at a time t1 after the rising edge of the first
readout signal;

10 generating the falling edge of a second readout signal pulse at a time t2 that
is after time t1;

measuring a first average brightness at time t2;
ending preliminary flashing at a time t3 after time t2;
generating the rising edge of a third readout signal pulse at a time t4; and
15 measuring a second average brightness at time t4.

25. A camera comprising:

an image sensing portion;
an image signal processing portion;
20 a light emitting device;
a light emission driving portion;

a microcontroller that generates a control signal and transmits the control
signal to the light emission driving portion; and

25 a timing signal generator that generates both a read-out signal and a vertical
sync signal and transmits each of the read-out signal and the vertical sync signal to
both the image sensing portion and the microcontroller.

26. The camera of claim 25, wherein the read-out signal comprises
substantially smaller pulses than the vertical sync signal.

30 27. The camera of claim 25, wherein the rising edge of each read-out
signal is generated after the falling edge of each vertical sync signal.

28. The camera of claim 25, wherein the camera is a digital camera.